# Commonwealth of Kentucky Environmental and Public Protection Cabinet Department for Environmental Protection Division for Air Ovality

Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

### **Proposed**

### AIR QUALITY PERMIT Issued under 401 KAR 52:020

Permittee Name: Gallatin Materials, LLC

Mailing Address: 525 Hance Road, Verona, Kentucky 41092

Source Name: Gallatin Material, LLC

Mailing Address: Same as above

Source Location: 525 Hance Road, Verona, Kentucky 41092

Permit Number: V-06-018 Source A. I. #: 71400

**Activity #: APE20050001** 

Review Type: Construction/Operation, Title V, PSD

Source ID #: 21-077-00031

**Regional Office:** Florence

8020 Veterans Memorial Drive, Suite 110

Florence, KY 41042 (859) 525-4923

**County:** Gallatin

**Application** 

Complete Date: February, 23, 2006
Issuance Date: June 27, 2006

**Revision Date:** N.A.

**Expiration Date:** June 27, 2011

John S. Lyons, Director Division for Air Quality

#### **Commonwealth of Kentucky**

Environmental and Public Protection Cabinet Department for Environmental Protection Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

#### Title V AIR QUALITY PERMIT Issued under 401 KAR 52:020

Permittee Name: Gallatin Materials, LLC

Mailing Address: 525 Hance Road, Verona, Kentucky 41092

is authorized to construct and operate a lime manufacturing facility

**Source Name:** Gallatin Materials, LLC

Mailing Address: Same as above

Source Location: 525 Hance Road, Verona, Kentucky 41092

Permit Number: V-06-018

**Activity ID #: APE20050001** 

**Review Type:** Construction / Operating, Title V, PSD

Source ID #: 21-077-00031

AI Number: 71400 SIC Code: 3274

**Regional Office:** Florence Regional Office

8020 Veterans Memorial Drive, Suite 110

Florence, KY 41042

(859) 525-4923

**County:** Gallatin

**Application** 

Complete Date: February 23, 2006

Issuance Date: June 27, 2006

**Expiration Date:** June 26, 2011

John S. Lyons, Director Division for Air Quality

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#### **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application, the Kentucky Division for Air Quality hereby authorizes the construction and operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify an affected facility without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in Regulation 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining other permits, licenses, or approvals that may be required by the Cabinet or any other federal, state, or local agency.

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### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

#### **LIMESTONE HANDLING:**

#### **Processing:**

01 (LH19) Conveyor and Transfer Points (#LS-C06) (24" x 220')

[From Underground Feeders (Stockpile #LSP3) to Screen #LS-S01]

(Maximum Process Rate – 250 tons/hour)

Constructed: 2006

Control: Partial Enclosure with Water Atomizers

(LH19A) Screen (#LS-S01) (Mogensen Sizer - 5' x 10' Quadruple-Deck)

(Maximum Rated Capacity – 250 tons/hour)

(From Conveyor #LS-C06 to Conveyors #LS-C07 and #LS-C08;

Concrete Bunker #LS-N01; and Storage Bin #1-N01)

Constructed: 2006

Control: Partial Enclosure with Water Atomizers

(LH20) Concrete Bunker (#LS-N01) (+2 1/2)

(From Screen #LS-S01 to Loadout)

(Maximum Process Rate – 25 tons/hour)

Control: Partial Enclosure with Water Atomizers

(-) Plant Loadout [Return to (Sterling Ventures)]

(Front-End Loader from Concrete Bunker #LS-N01)

(Maximum Process Rate – 25 tons/hour)

Control: Moist Material

(-) Truck Loadout

(Front-End Loader from Concrete Bunker #LS-N01)

(Maximum Process Rate – 25 tons/hour)

Control: Moist Material

(LH21) Conveyor and Transfer Points (#LS-C07) (24" x 280')

(From Screen #LS-S01 to Stockpile #LSP4)

(Maximum Process Rate – 25 tons/hour)

Constructed: 2006

Control: Water Atomizers

(LH22) Stockpile (#LSP4) (Fines)

(From Conveyor #LS-C07)

(Maximum Process Rate – 25 tons/hour)

Control: Moist Material

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

<u>LIMESTONE HANDLING</u>: (CONTINUED)

**Processing: (Continued)** 

01 (LH23) Plant Loadout [Return to (Sterling Ventures)]

(Front-End Loader from Stockpile #LSP4) (Maximum Process Rate – 25 tons/hour)

Control: Moist Material

(LH24) Splitter (#LS-G01)

(From Screen #LS-S01 to Storage Bin #1-N01 and Conveyor #LS-C08)

(Maximum Process Rate – 250 tons/hour)

Constructed: 2006

Control: Partial Enclosure with Water Atomizers

(LH25) Kiln #1 Storage Bin (#1-N01)

(From Splitter #LS-G01 to Weigh Hopper #1-N02)

(Maximum Process Rate – 250 tons/hour)

Constructed: 2006

Control: Partial Enclosure with Water Atomizers

(LH28) Kiln #1 Weigh Hopper (#1-N02)

(From Storage Bin #1-N01 to Skip Hoist #1-E01)

(Maximum Process Rate – 120 tons/hour)

Constructed: 2006

Control: Water Atomizers

(LH29) Skip Hoist (#1-E01)

(From Weigh Hopper #1-N02 to Receiving Hopper #1-N03)

(Maximum Process Rate – 120 tons/hour)

Constructed: 2006

Control: Partial Enclosure with Water Atomizers

(LH31) Receiving Hopper (#1-N03)

(From Skip Hoist to Pre-Heater #1-PH01) (Maximum Process Rate – 120 tons/hour)

Constructed: 2006

Control: Water Atomizers

(LH26) Conveyor and Transfer Points (#LS-C08) (24" x 80')

(From Splitter #LS-G01 to Storage Bin #2-N01)

(Maximum Process Rate – 250 tons/hour)

Constructed: 2006

Control: Partial Enclosure with Water Atomizers

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

<u>LIMESTONE HANDLING</u>: (CONTINUED)

**Processing:** (Continued)

01 (LH27) Kiln #2 Storage Bin (#2-N01)

(From Conveyor #LS-C08 to Weigh Hopper #2-N02)

(Maximum Process Rate – 250 tons/hour)

Constructed: 2006

Control: Partial Enclosure with Water Atomizers

(LH33) Kiln #2 Weigh Hopper (#2-N02)

(From Storage Bin #2-N01 to Skip Hoist #2-E01)

(Maximum Process Rate – 120 tons/hour)

Constructed: 2006

Control: Water Atomizers

(LH34) Skip Hoist (#2-E01)

(From Weigh Hopper #2-N02 to Receiving Hopper #2-N03)

(Maximum Process Rate – 120 tons/hour)

Constructed: 2006

Control: Partial Enclosure with Water Atomizers

(LH36) Receiving Hopper (#2-N03)

(From Skip Hoist to Pre-Heater #1-PH01) (Maximum Process Rate – 120 tons/hour)

Constructed: 2006

Control: Water Atomizers

#### **LIME ADDITIVES SYSTEM:**

12 (MC1) Receiving Hopper (Truck Dump) (#1-N07)

**(To Conveyor #1-F05)** 

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Partial Enclosure

(MC2) Conveyor and Transfer Points (#1-F05) (24" x 28')

(From Receiving Hopper #1-N07 to Elevator #1-E02)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure with Water Atomizers

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# SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **LIME ADDITIVE SYSTEM: (CONTINUED)**

12 (MC3) Elevator (#1-E02)

(From Conveyor #1-F05 to Splitter #1-G11) (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

(MC4) Splitter (#1-G11)

[From Elevator #1-E02 to Chute (-)] (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

(-) Chute (-)

(From Splitter #1-G11 to Conveyor #1-C18) (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

(MC5) Conveyor and Transfer Point (#1-C18) (24" x 8")

[From Chute (-) to Splitter #1-G12] (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

(MC6) Splitter (#1-G12)

[From Conveyor #1-C18 to Chutes (-)] (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

(-) Chute (-)

(From Splitter #1-G12 to Silo #1-T09) (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

(-) Chute (-)

(From Splitter #1-G12 to Silo #1-T10) (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **HAUL ROAD AND YARD AREA:**

14 Haul Road and Yard Area (Paved)
(All Haul Roads and Yard Area)

Constructed: 2006

Control: Water Spray and Sweeping

#### **APPLICABLE REGULATIONS:**

Regulation 401 KAR 63:010, Fugitive emissions, applies to each of the affected facilities listed above.

40 CFR 63, Subpart AAAAA, National Emissions Standards for Hazardous Air Pollutants for Lime Manufacturing Plants, which applies to the two conveyor and transfer points, emission points 01 (LH19) and (LH26); the one screen, emission point 01 (LH19A); the two kiln storage bins, emission points 01 (LH25) and (LH27); the two kiln weigh hoppers, emission points 01 (LH28) and (LH33); the two skip hoists, emission points 01 (LH29) and (LH34); the two receiving hoppers, emission points 01 (LH31) and (LH36); and the one concrete bunker, emission point 01 (LH20).

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality, applies to each of the affected facilities listed above.

#### 1. Operating Limitations:

- a. Pursuant to 40 CFR 63, Subpart AAAAA, Table 2, a written operations, maintenance, and monitoring (OM&M) plan must be prepared. The plan must include the items listed in 40 CFR 63.7100(d) and the corrective actions to be taken when required in Table 5 to this subpart.
- b. The open stockpiling, or accumulation on, under, or against pieces of equipment or structures, of lime material (product that has fallen from a conveyor system, reject material, hydrate, or any other form of lime) is prohibited. [401 KAR 63:010]

#### 2. Emission Limitations:

a. Fugitive emissions from the two conveyor and transfer points, emission points 01 (LH19) and (LH26); the one screen, emission point 01 (LH19A); the two kiln storage bins, emission points 01 (LH25) and (LH27); the two kiln weigh hoppers, emission points 01 (LH28) and (LH33); the two skip hoists, emission points 01 (LH29) and (LH34); the two receiving hoppers, emission points 01 (LH31) and (LH36); and the one concrete bunker, emission point 01 (LH20); shall not exhibit greater than ten percent (10%) opacity, each, as specified in Regulation 40 CFR 63, Subpart AAAAA, Table 1.

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 2. <u>Emission Limitations</u>: (Continued)

- b. The materials processed at each affected facility listed above shall be controlled with wet suppression, enclosures, and/or dust collection equipment so as to comply with the requirements specified in Regulation 401 KAR 63:010, Fugitive emissions, Section 3. Standards for fugitive emissions.
- c. Pursuant to Regulation 401 KAR 63:010, Section 3 (1), no person shall cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished, or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
  - 1) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
  - 2) Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts;
  - 3) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling. Adequate containment methods shall be employed during sandblasting or other similar operations.
  - 4) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;
  - 5) The maintenance of paved roadways in a clean condition;
  - 6) The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water.
- d. Pursuant to Regulation 401 KAR 63:010, Section 3 (2), no person shall cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate.
- e. Pursuant to Regulation 401 KAR 63:010, Section 3 (3), when dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the Secretary may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or air-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air.

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 2. <u>Emission Limitations</u>: (Continued)

- f. Pursuant to Regulation 401 KAR 63:010, Section 4, Additional Requirements, in addition to the requirements of Section 3 of this regulation, the following shall apply:
  - 1) Pursuant to Regulation 401 KAR 63:010, Section 4 (1), open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered at all times when in motion.
  - 2) Pursuant to Regulation 401 KAR 63:010, Section 4 (4), no one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway.

#### **Compliance Demonstration Method:**

- a. In determining initial compliance with the opacity standards for the two conveyor and transfer points, emission points 01 (LH19) and (LH26); the one screen, emission point 01 (LH19A); the two kiln storage bins, emission points 01 (LH25) and (LH27); the two kiln weigh hoppers, emission points 01 (LH28) and (LH33); the two skip hoists, emission points 01 (LH29) and (LH34); the two receiving hoppers, emission points 01 (LH31) and (LH36); and the one concrete bunker, emission point 01 (LH20); as listed above, the owner or operator must use Method 9 according to item 17 in Table 4 of 40 CFR 63, Subpart AAAAA and in accordance with 40 CFR 63.7112(l)(1) through (3).
- b. In demonstrating subsequent annual compliance with the specified opacity limitations listed above, as required by 401 KAR 52:020, Section 22, Annual Emissions Certifications, and/or upon request by the Division, the owner or operator must use, as directed by 40 CFR 63.7112(l), Method 9 according to item 17 in Table 4 of 40 CFR 63, Subpart AAAAA and in accordance with 40 CFR 63.7112(l)(1) through (3).
- c. Sources subject to 40 CFR 63, Subpart AAAAA must comply with the emission limitations for the affected source upon startup. All applicable performance tests must be completed no later than 180 days after startup utilizing the tests and procedures listed in Table 4 for each affected facility.
- d. See Attachments, Table 3, for initial compliance with 40 CFR 63, Subpart AAAAA emission limits per 40 CFR 63.7114.

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 2. <u>Emission Limitations</u>: (Continued)

#### **Compliance Demonstration Method:** (Continued)

e For the purpose of demonstration of continuing compliance, the following guidelines shall be followed:

Pursuant to Regulation 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation in accordance with the manufacturer's specifications and/or standard operating procedures at any time an affected facility for which the equipment and measures are designed is operated, except as provided by Regulation 401 KAR 50:055, Section 1. The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the emission points are in operation but the associated control equipment is not.

- f. See **4. Specific Monitoring Requirements** below.
- g. See Section G, Condition (d)4.

#### 3. <u>Testing Requirements</u>:

- a. Pursuant to 40 CFR 63.7083(a)(2), all applicable performance tests on an affected source started up after January 5, 2004 must be completed no later than 180 days after startup. Requirements for performance tests are listed in Table 4 to Subpart AAAAA.
- b. Although 40 CFR 63.7111 requires a performance test to be conducted within 5 years following the initial performance test and within 5 years following each subsequent performance test thereafter, 401 KAR 52:020, Section 21, requires an annual compliance certification. Pursuant to 40 CFR 63.7112(l), EPA Method 9 must be used to determine compliance with the opacity standards.
- c. Pursuant to 40 CFR 63.7112(c), performance tests may not be conducted during periods of startup, shutdown, or malfunction, as specified in 40 CFR 63.7(e)(1).
- d. Pursuant to 40 CFR 63.7112(h), performance tests results must be documented in complete test reports that contain the information required by 40 CFR 63.7112(h)(1) through (10), as well as all other relevant information. The plan to be followed during testing must be made available to the Division at least 60 days prior to the testing.

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 3. <u>Testing Requirements</u>: (Continued)

- e. Pursuant to 40 CFR 63.7112(1), when determining compliance with the opacity standards for fugitive emissions from PSH operations in item 7 of Table 1 of Subpart AAAAA, a Method 9 must be conducted according to item 17 in Table 4 of Subpart AAAAA, and in accordance with the following:
  - 1) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
  - 2) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun must be followed.
  - 3) If wet suppression is used to control PM from PSH operations, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not considered VE. When a water mist of this nature is present, emissions must be observed at a point in the plume where the mist is not longer visible.
- f. See Section G, Condition (d)5 and 7.

#### 4. **Specific Monitoring Requirements:**

- Observations are required during each shift, and when any change in method of a. operation or material occurs, of all operations and control equipment to ensure the control equipment is functioning while the associated equipment is in operation, and during daylight hours of each shift, to determine if any air emissions are visible from the equipment or the controls. These observations will be done at any processing rate of the equipment that would preclude circumvention of the intent of this requirement. If visible emissions are observed coming from those points listed above that are covered by 40 CFR 63, Subpart AAAAA, the permittee shall perform a Method 9 reading. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluation. If visible emissions are observed coming from all other points listed above, the permittee shall perform a Method 22 reading. The amount of time that visible emissions occur during the observation period (accumulated emission time) shall be recorded in the daily log. Pursuant to 40 CFR 60, Attachment A, Method 22, 2.3, the observer must be knowledgeable with respect to the general procedures for determining the presence of visible emissions. At a minimum, he/she must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training is to be obtained from written materials found in the references listed in 40 CFR 60, Appendix A, Method 22; or from the lecture portion of the Method 9 certification course.
- b. See Section F, Conditions 2, 7, and 8.

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 4. **Specific Monitoring Requirements:** (Continued)

c. See Attachments, Table 6, for additional monitoring requirements under 40 CFR 63, Subpart AAAAA.

#### 5. Specific Recordkeeping Requirements:

- a. Records of daily observations, and support information shall be kept in accordance with the provisions of Section F, Condition 2.
- b. A log shall be kept of all routine and non-routine maintenance performed on each control device.
- c. Records shall be kept as required under 40 CFR 63.7132:
  - 1) Pursuant to 40 CFR 63.7132 (a)(1) through (3):
    - a) A copy of each notification and report submitted to comply with 40 CFR 63, Subpart AAAAA, including all documentation supporting any Initial Notification or Notification Compliance Status submitted in accordance to the requirements in 40 CFR 63.10(b)(2)(xiv),
    - b) The records in 40 CFR 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
    - c) Records of performance tests, performance evaluations, and opacity and VE observations.
  - 2) Pursuant to 40 CFR 63.7132 (b), records in 40 CFR 63.6(h)(6) must be kept for VE observations.
  - 3) Pursuant to 40 CFR 63.7132 (c), records required by Tables 5 and 6 of 40 CFR 63, Subpart AAAAA, must be kept to show continuous compliance with each emission limitation that applies to the facility.
  - 4) Pursuant to 40 CFR 63.7132 (d), records must be kept which document the basis for the initial applicability determination as required under 40 CFR 63.7081.
- d. See 40 CFR 63.7133 for additional recordkeeping requirements.
- e. See Section F, Conditions 1 and 2.

#### 6. **Specific Reporting Requirements:**

- a. See 40 CFR 63.7130, 63.7131, and Table 7 to Subpart AAAAA for reporting requirements under 40 CFR 63, Subpart AAAAA.
- b. See Section F, Conditions 5, 6, 7, 8, 9, and 10.

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 6. **Specific Reporting Requirements:** (Continued)

c. See Section G, Conditions (a)4 and 5, (d)2, and (f)1.

#### 7. Specific Control Equipment Operating Conditions:

- a. All air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation in accordance with the manufacturer's specifications and/or standard operating procedures at any time an affected facility for which the equipment and measures are designed is operated. Failure to comply with the requirement that all pollution control equipment and measures be operating any time the associated piece of equipment is operating is a violation of this permit and may result in enforcement action. Pursuant to Regulation 401 KAR 63:010, Section 3 (3), a violation of any administrative regulation, may result in the Secretary ordering that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or air-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air.
- b. If any control method(s) proposed in the permit application prove to be inadequate to meet the emission requirements listed in the permit, the Division reserves the right to require additional controls, or another form of control, be utilized to meet the permit requirements.

#### 8. <u>Alternate Operating Schedule:</u>

N/A

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **COAL / COKE HANDLING:**

Kiln #1:

Coal:

02 (CH1) Receiving Hopper (Truck Dump) (#1-N07)

(To Conveyor #1-F05)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Partial Enclosure

(CH2) Conveyor and Transfer Points (#1-F05) (24" x 28')

(From Receiving Hopper #1-N07 to Elevator #1-E02)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure with Water Atomizers

(CH3) Elevator (#1-E02)

(From Conveyor #1-F05 to Splitter #1-G05) (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

(CH4) Splitter (#1-G05)

[From Elevator #1-E02 to Chute (-)] (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

(-) Chute (-)

(From Splitter #1-G05 to Coal Silo #1-T01) (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

(CH5) Coal Silo (#1-T01)

[From Chute (-) to Weigh Belt Feeder #1-C16)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**COAL / COKE HANDLING: (CONTINUED)** 

**Kiln #1**: (Continued)

**Coal**:

02 (CH6) Weigh Belt Feeder (#1-C16) (24" x 8")

(From Coal Silo #1-T01 to Bowl Mill #1-R01)

(Maximum Process Rate – 8 tons/hour)

Constructed: 2006

Control: Total Enclosure

(CH7) Crusher (#1-R01) (Raymond Bowl Mill #473A)

(Maximum Rated Capacity – 8 tons/hour)

(From Weigh Belt Feeders #1-C16 and #1-C17 to Kiln #1 Burner #1-

W01)

Constructed: 2006

Control: Moist Material

**Coke**:

03 (PCH1) Receiving Hopper (Truck Dump) (#1-N07)

(To Conveyor #1-F05)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Partial Enclosure

(PCH2) Conveyor and Transfer Points (#1-F05) (24" x 28')

(From Receiving Hopper #1-N07 to Elevator #1-E02)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure with Water Atomizers

**(PCH3) Elevator** (#1-E02)

(From Conveyor #1-F05 to Splitter #1-G05) (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

(PCH4) Splitter (#1-G05)

[From Elevator #1-E02 to Chute (-)] (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**COAL / COKE HANDLING: (CONTINUED)** 

**Kiln #1: (Continued)** 

**Coke**:

03 (-) Chute (-)

(From Splitter #1-G05 to Coal Silo #1-T02) (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

(PCH5) Coke Silo (#1-T02)

[From Chute (-) to Weigh Belt Feeder #1-C17]

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

(PCH6) Weigh Belt Feeder (#1-C17) (24" x 8')

(From Coke Silo #1-T02 to Bowl Mill #1-R01)

(Maximum Process Rate – 8 tons/hour)

Constructed: 2006

Control: Total Enclosure

(PCH7) Crusher (#1-R01) (Raymond Bowl Mill #473A)

(Maximum Rated Capacity – 8 tons/hour)

(From Weigh Belt Feeders #1-C16 and #1-C17 to Kiln #1 Burner #1-

W01)

Constructed: 2006

Control: Moist Material

**Kiln #2:** 

Coal:

04 (CH9) Receiving Hopper (Truck Dump) (#2-N07)

(To Conveyor #2-F05)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Partial Enclosure

(CH10) Conveyor and Transfer Points (#2-F05) (24" x 28')

(From Receiving Hopper #2-N07 to Elevator #2-E02)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure with Water Misters

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**COAL / COKE HANDLING: (CONTINUED)** 

**Kiln #2**: (Continued)

**Coal:** (Continued)

04 (CH11) Elevator (#2-E02)

(From Conveyor #2-F05 to Splitter #2-G05) (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

(CH12) Splitter (#2-G05)

[From Elevator #2-E02 to Chute (-)] (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

(-) Chute (-)

(From Splitter #2-G05 to Coal Silo #2-T01) (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

(CH13) Coal Silo (#2-T01)

[From Chute (-) to Weigh Belt Feeder #2-C16]

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

(CH14) Weigh Belt Feeder (#2-C16) (24" x 8")

(Maximum Rated Capacity – 8 tons/hour) (From Coal Silo #2-T01 to Bowl Mill #2-R01)

Constructed: 2006

Control: Total Enclosure

(CH15) Crusher (#2-R01) (Raymond Bowl Mill #473A)

(Maximum Rated Capacity – 8 tons/hour)

(From Weigh Belt Feeders #2-C16 and #2-C17 to Kiln #2 Burner #2-

W01)

Constructed: 2006

Control: Moist material

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**COAL / COKE HANDLING: (CONTINUED)** 

**Kiln #2: (Continued)** 

**Coke**:

05 (PCH9) Receiving Hopper (Truck Dump) (#2-N07)

(To Conveyor #2-F05)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Moist material

(PCH10) Conveyor and Transfer Points (#2-F05) (24" x 28')

(From Receiving Hopper #2-N07 to Elevator #2-E02)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure with Water Misters

**(PCH11) Elevator** (#2-E02)

(From Conveyor #2-F05 to Splitter #2-G05) (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

(PCH12) Splitter (#2-G05)

[From Elevator #2-E02 to Chute (-)] (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

(-) Chute (-)

(From Splitter #2-G05 to Coke Silo #2-T02) (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

(PCH13) Coke Silo (#2-T02)

[From Chute (-) to Weigh Belt Feeder #2-C17]

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Total Enclosure

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**COAL / COKE HANDLING: (CONTINUED)** 

**Kiln #2:** (Continued)

**Coke:** (Continued)

05 (PCH14) Weigh Belt Feeder (#2-C17) (24" x 8')

(Maximum Rated Capacity – 8 tons/hour) (From Coke Silo #2-T02 to Bowl Mill #2-R01)

Constructed: 2006

Control: Total Enclosure

(PCH15) Crusher (#2-R01) (Raymond Bowl Mill #473A)

(Maximum Rated Capacity – 8 tons/hour)

(From Weigh Belt Feeders #2-C16 and #2-C17 to Kiln #2 Burner #2-

W01)

Constructed: 2006

Control: Moist material

#### **APPLICABLE REGULATIONS:**

Regulation 401 KAR 60:005, Standards of performance for new stationary sources, which incorporates by reference 40 CFR 60.250 (40 CFR 60, Subpart Y), applies to each of the affected facilities listed above.

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality, applies to each of the affected facilities listed above.

#### 1. **Operating Limitations:**

N/A

#### 2. Emission Limitations:

Fugitive emissions from the two receiving hoppers, emission points 02 (CH1) / 03 (PCH1) and 04 (CH9) / 05 (PCH9); the two conveyor and transfer points, emission points 02 (CH2) / 03 (PCH2) and 04 (CH10) / 05 (PCH10); the two elevators, emission points 02 (CH3) / 03 (PCH3) and 04 (CH11) / 05 (PCH11); the two splitters, emission points 02 (CH4) / 03 (PCH4) and 04 (CH12) / 05 (PCH12); the four silos, emission points 02 (CH5), 03 (PCH5), 04 (CH13), and 05 (PCH13); the four chutes, emission points 02 (-), 03 (-), 04 (-), and 05 (-); the four weigh belt feeders, emission points 02 (CH6), 03 (PCH6), 04 (CH14), and 05 (PCH14); and the two crushers, emission point 02 (CH7) / 03 (PCH7) and 04 (CH15) / 05 (PCH15); shall not exhibit greater than twenty percent (20%) opacity, each, as specified in 40 CFR 60.252(c).

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 2. <u>Emission Limitations</u>: (Continued)

#### **Compliance Demonstration Method:**

- a. In determining initial compliance with the opacity standards as listed above, the owner or operator shall use, as directed by 40 CFR 60.254(b)(2), Method 9 and the procedures as described in 40 CFR 60.11.
- b. To ensure continued compliance with the specified opacity limitations listed above, subsequent annual compliance demonstrations, as required by 401 KAR 52:040, Section 20, Annual Emissions Certifications for Specified Sources, or more frequent compliance demonstrations as deemed necessary by the Division to ensure continued compliance, the owner or operator shall use, as directed by 40 CFR 60.254(b)(2), Method 9 and the procedures as described in 40 CFR 60.11.
- c. See Section G, Condition (d)4.

#### 3. <u>Testing Requirements</u>:

See Section G, Condition (d)5 and 7.

#### 4. Specific Monitoring Requirements:

- a. The permittee shall monitor and maintain records of the following parameters:
  - 1) The monthly production rate of raw material processed
  - 2) The monthly hours of operation (hours operated/month)
- b. Observations are required during each shift, and when any change in method of operation or material occurs, of all operations and control equipment to ensure the control equipment is functioning while the associated equipment is in operation, and during daylight hours of each shift, to determine if any air emissions are visible from the equipment or the controls. These observations will be done at any processing rate of the equipment that would preclude circumvention of the intent of this requirement. If visible emissions are observed, the permittee shall perform a Method 9 reading. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluation. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and date of certification.
- c. See Section F, Condition 2.

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# SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 5. Specific Recordkeeping Requirements:

- a. Records of opacity monitoring data, including daily observations, and support information shall be kept in accordance with the provisions of Section F, Condition 2. See 4.b. above.
- b. A log shall be kept of all routine and non-routine maintenance performed on each control device.
- c. See Section F, Conditions 1 and 2.

#### 6. Specific Reporting Requirements:

- a. See Section F, Conditions 5, 6, 7, 8, 9, 10 and 11.
- b. See Section G, Conditions (a)4 and 5, (d)2, and (f)1.

#### 7. Specific Control Equipment Operating Conditions:

If any control method(s) proposed in the permit application prove to be inadequate to meet the emission requirements listed in the permit, the Division reserves the right to require additional controls, or another form of control, be utilized to meet the permit requirements.

#### 8. <u>Alternate Operating Schedule:</u>

N/A

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### KILNS:

06 (K1) Rotary Preheater Lime Kiln #1 / Pulverized Fuel Burner

(Kiln - 13' x 200')

(Kiln: Maximum Rated Capacity – 70 tons/hour of stone)

(Fuel: Pulverized Coal

Maximum Rated Capacity – 5.98 tons/hour, or

**Petroleum Coke** 

Maximum Rated Capacity – 4.27 tons/hour, or

Coal and Petroleum Coke Blend

Maximum Rated Capacity – 2.99 tons/hour coal and

2.14 tons/hour coke)

Constructed: 2006

Control: Baghouse (Pulse-Air) (1-D01)

[Model: Aeropulse M-8-196(6)-H-Y]

(LM1) Kiln #1 Lime Cooler (#1-N06)

(From Kiln #1 to Conveyors #LM3A, #LM3B, #LM4A, and #LM4B)

(Maximum Process Rate – 35 tons/hour lime)

Constructed: 2006

Control: Baghouse (Pulse-Air) (1-D01)

[Model: Aeropulse M-8-196(6)-H-Y]

07 (K2) Rotary Preheater Lime Kiln #2 / Pulverized Fuel Burner

 $(Kiln - 13' \times 200')$ 

(Kiln: Maximum Rated Capacity – 70 tons/hour of stone)

(Fuel: Pulverized Coal

Maximum Rated Capacity – 5.98 tons/hour, or

**Petroleum Coke** 

Maximum Rated Capacity – 4.27 tons/hour, or

Coal and Petroleum Coke Blend

Maximum Rated Capacity – 2.99 tons/hour coal and

2.14 tons/hour coke)

Constructed: 2006

Control: Baghouse (Pulse-Air) (2-D01)

[Model: Aeropulse M-8-196(6)-H-Y]

(LM2) Kiln #2 Lime Cooler (#2-N06)

(From Kiln #2 to Conveyors #LM7A, #LM7B, #LM8A, and #LM8B)

(Maximum Process Rate – 35 tons/hour lime)

Constructed: 2006

Control: Baghouse (Pulse-Air) (2-D01)

[Model: Aeropulse M-8-196(6)-H-Y]

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **APPLICABLE REGULATIONS:**

Regulation 401 KAR 60:005, Standards of performance for new stationary sources, which incorporates by reference 40 CFR 60.340 (40 CFR 60, Subpart HH), applies to each of the affected facilities listed above.

40 CFR 63, Subpart AAAAA, National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants, which applies to all the emission units listed above.

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality, applies to each of the affected facilities listed above.

#### 1. **Operating Limitations:**

- a. Lime production for each kiln shall not exceed 35 ton per hour (70 tons per hour stone feed).
- b. Fuel shall be coal, petroleum coke, or a blend of coal and petroleum coke. The fuel will have a minimum heating value equal to or greater than the heating value of the fuel used during compliance testing. The sulfur content of the fuel will be equal to or less than the sulfur content of the fuel used during compliance testing.
- c. Pursuant to 40 CFR 63, Subpart AAAAA, Table 2, a written operations, maintenance, and monitoring (OM&M) plan must be prepared. The plan must include the items listed in 40 CFR 63.7100(d) and the corrective actions to be taken when required in Table 5 to this subpart.
- d. See 40 CFR 63, Subpart AAAAA, Table 2.

#### 2. <u>Emission Limitations</u>:

- a. Pursuant to Regulations 401 KAR 60:005; 40 CFR 63, Subpart AAAAA, and 401 KAR 51:017:
  - 1) Particulate matter (PM/PM<sub>10</sub>) emissions from each kiln, emission points 06 (K1) and 07 (K2), shall not exceed 0.10 lb/ton of stone feed (lb/tsf). [40 CFR 63, Subpart AAAAA, Table 1]
  - 2) Visible emissions discharged into the atmosphere from each kiln shall not exceed 15 percent (15%) opacity when exiting from a dry emission control device. [40 CFR 60.342(a)(2)]
  - 3) Sulfur dioxide emissions from each kiln shall not exceed 12.25 lbs/hour (3-hour averaging time.).
  - 4) Nitrogen oxides emissions from each kiln shall not exceed 108.5 lbs/hour (annual averaging time).
  - 5) Carbon monoxide emissions from each kiln shall not exceed 52.5 lbs/hour (1-hour averaging time).

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **Emission Limitations:** (Continued)

#### **Compliance Demonstration Method:**

- a. In determining compliance with the particulate matter standards listed in a. 1) above, the owner or operator shall use the procedures as described in 40 CFR, Subpart AAAAA, Tables 3, 4, and 5; and Sections 63.7112 and 63.7121.
  - 1) Pursuant to 40 CFR 63.7112(e), compliance with the particulate matter standards listed in a. 1) above for each lime kiln shall be determined using the following equation:

$$E = (C_kQ_k + C_cQ_c) / PK$$
, where

E = emission rate of particulate matter, lb/ton of stone feed

 $C_k$  = concentration of particulate matter in the kiln effluent, gr/dscf

 $Q_k$  = volumetric flow rate of effluent gas, dscf/hr

 $C_c$  = concentration of particulate matter in the cooler effluent, gr/dscf. (This value is zero if there is not a separate cooler exhaust to the atmosphere.)

Q<sub>c</sub> = volumetric flow rate of cooler effluent gas, dscf/hr. (This value is zero if there is not a separate cooler exhaust to the atmosphere.)

P = stone feed rate, ton/hr

K = conversion factor, 7000gr/lb

- 2) In determining compliance with the particulate matter standards utilizing a weighted average emission limit, the owner or operator shall use the procedures as described in 40 CFR, Subpart AAAAA, Table 3 and Section 63.7112.
- b. In determining initial compliance with the opacity standard listed in a. 2) above, the owner or operator shall use Reference Method 9 and the procedures as described in 40 CFR 60.11.
- c. In demonstrating subsequent annual compliance with the specified opacity limitations listed above, as required by 401 KAR 52:040, Section 20, Annual Emissions Certifications for Specified Sources, and/or upon request by the Division, the owner or operator shall use Method 9 and the procedures as described in 40 CFR 60.11
- d. In determining compliance with the sulfur dioxide standard listed in a. 3) above, the owner or operator shall use Reference Method 6 as referenced in State Regulation 401 KAR 50:015, Section 1.
- e. In determining compliance with the nitrogen oxides standard listed in a. 4) above, the owner or operator shall use Reference Method 7 as referenced in State Regulation 401 KAR 50:015, Section 1.

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **Emission Limitations:** (Continued)

#### **Compliance Demonstration Method: (Continued)**

- f. In determining compliance with the carbon monoxide standard listed in a. 5) above, the owner or operator shall use Reference Method 10 as referenced in State Regulation 401 KAR 50:015, Section 1.
- g. In determining compliance with the sulfur content limitation of the coal and petroleum coke, the owner or operator may obtain certification from the supplier or a sample from each shipment must be tested to ensure compliance. The test method used to determine the percent sulfur in the coal will be ASTM Method D388-66(72).
- h. See Attachments, Table 3, for initial compliance with 40 CFR 63, Subpart AAAAA emission limits per 40 CFR 63.7114.
- i. See Attachments, Table 5, for continuous compliance with 40 CFR 63, Subpart AAAAA operating limits per 40 CFR 63.7121.
- j. See Section G, Condition (d)4.

#### 3. <u>Testing Requirements:</u>

- a. Pursuant to 40 CFR 60.343(d), for the purpose of conducting a performance test, the owner or operator shall install, calibrate, maintain, and operate a device for measuring the mass rate of stone feed to each rotary lime kiln. The measuring device used must be accurate to within  $\pm$  5 percent of the mass rate over its operating range.
- b. Pursuant to Regulation 401 KAR 50:055, General compliance requirements; 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing in accordance with EPA Method 5 for particulate matter as specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.
- c. Pursuant to Regulation 401 KAR 50:055, General compliance requirements; 401 KAR 50:045, Section 1, performance testing in accordance with EPA Method 6 for sulfur dioxide, EPA Method 7 for nitrogen oxides, and EPA Method 10 for carbon monoxide as specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.
- d. Pursuant to 40 CFR 63.7083(a)(2), all applicable performance tests on a new affected source must be completed no later than 180 days after startup, according to the provisions in 40 CFR 63.7(a)(2) and 40 CFR 63.7114.
- e. Pursuant to 40 CFR 63.7111, a performance test must be conducted within 5 years following the initial performance test and within 5 years following each subsequent performance test thereafter.

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **Testing Requirements: (Continued)**

- f. Pursuant to 40 CFR 63.7112(c), performance tests may not be conducted during periods of startup, shutdown, or malfunction, as specified in 40 CFR 63.7(e)(1).
- g. Pursuant to 40 CFR 63.7112(d), except for opacity and VE observations, three separate test runs must be conducted for each required performance test, as specified in 40 CFR 63.7(e)(3). Each test run must last at least 1 hour.
- h. Pursuant to 40 CFR 63.7112(h), the plan to be followed during testing must be made available to the Division at least 60 days prior to the testing.
- i. See Attachments, Table 4, for performance test requirements under 40 CR 63, Subpart AAAAA.
- j. See 40 CFR 63.7112 for additional performance test requirements.
- k. See Section G, Condition (d)5 and 7.
- 1. The permittee may submit to the Division a request for consideration of alternative testing methods, or minor changes in methodology.

#### 4. **Specific Monitoring Requirements:**

- a. Pursuant to 40 CFR 60.343(a), the owner or operator shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the opacity of a representative portion of the gases discharged into the atmosphere from each kiln. The span of this system shall be set at 40 percent (40%) opacity.
- b. The permittee shall monitor and maintain records of the following parameters for Emission Points 10 (K1) and 11 (K2):
  - 1) The monthly amount of material placed in each kiln.
  - 2) The monthly hours of operation (hours operated / month) of each kiln.
  - 3) The monthly amount of lime produced from each kiln.
- c. Pursuant to 40 CFR 63.7113, the permittee must:
  - 1) Install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the OM&M plan required by 40 CFR 63:7100(d) and 40 CFR 63:7113(a)(1) through (5), and each continuous opacity monitoring system (COMS) as required by 40 CFR 63:7113(g).
  - 2) For each flow measurement device, meet the requirements in 40 CFR 63:7113(a)(1) through (5) and (b)(1) through (4).
  - 3) For each pressure measurement device, meet the requirements in 40 CFR 63:7113(a)(1) through (5) and (c)(1) through (7).

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 4. **Specific Monitoring Requirements:** (Continued)

- c. 4) For each bag leak detection system (BLDS), meet any applicable requirements in 40 CFR 63:7113(a)(1) through (5) and (d)(1) through (8).
  - 5) For each PM detector, meet any applicable requirements in 40 CFR 63:7113(a)(1) through (5) and (e)(1) through (8).
  - 6) For each emission unit equipped with an add-on air pollution control device, inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in item 6 of Table 2 and record the results of each inspection.
  - 7) For each COMS used to monitor an add-on air pollution control device, meet the requirements in 40 CFR 63:7113(g)(1) and (2).

#### 5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the following information for the baghouses:
  - 1) The design and / or manufacturer's specifications.
  - 2) The operational procedures and preventative maintenance records.
  - 3) During all periods of startup, shutdown, or malfunction of the baghouse, a daily (calendar day) log shall be kept of whether any air emissions were visible from the stack associated with the baghouse.
  - 4) If no visible emissions are observed, then no further monitoring is required. If visible emissions are observed, the permittee shall perform a Method 9 reading. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and date of certification.
- b. Records shall be maintained of any 6-minute average that is in excess of the emissions specified under **2. a. 2**) **Emissions Limitations** above.
- c. If 40 CFR 60.343(b) applies, the opacity shall be recorded for any point(s) where visible emissions are observed for at least three 6-minute periods. The corresponding feed rate of the kiln shall also be recorded.
- d. Records of opacity monitoring data, including daily observations, and support information shall be kept in accordance with the provisions of Section F, Condition 2.
- e. A log shall be kept of all routine and non-routine maintenance performed on each control device.
- f. See **4. Specific Monitoring Requirements** above for additional recordkeeping requirements.

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 5. Specific Recordkeeping Requirements: (Continued)

g. See Section F, Conditions 1 and 2.

#### **6.** Specific Reporting Requirements:

- a. Pursuant to 40 CFR 60.343(e), the owner or operator shall submit reports of excess emissions of all 6-minute periods during which the average opacity of the visible emissions from any lime kiln utilizing a continuous monitoring system is greater than 15 percent.
- b. Pursuant to 40 CFR 60.343(e), if visible emission observations are made by a certified visible emissions observer performing a Method 9 test, reports of excess emissions shall be submitted semiannually.
- c. See 40 CFR 63.7131 for additional reporting requirements.
- d. See Section F, Conditions 5, 6, 7, 8, 9, 10 and 11.
- e. See Section G, Conditions (a)4 and 5, (d)2, and (f)1.

#### 7. Specific Control Equipment Operating Requirements:

- a. All pollution control devices shall be in place, properly maintained, and in operation in accordance with the manufacturer's specifications and/or operating procedures at all times the associated emission points are in use. The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the emission points are in operation but the associated baghouse is not.
- b. If any control device that requires its associated piece(s) of equipment to be enclosed to function effectively as an emissions control, such; as a baghouse that is not sufficiently sealed as a result of poor maintenance, careless operation, or negligence, the Division will consider that control to have been circumvented. This will constitute a violation of this permit. The emissions generated by the piece(s) of equipment utilizing that control will be deemed fugitive in nature at that time. The violation must be corrected within thirty (30) days. Failure to correct the violation within thirty (30) days may result in enforcement action

#### 8. Alternate Operating Scenarios:

N/A

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **LIME HANDLING:**

#### Kiln #1 Lime Handling / Processing to Storage Silos:

08 (LM3A) Conveyor and Transfer Points (#1-F01) (Vibrating Feeder)

(From Lime Cooler #1-N06 to Bucket Elevator #1-E03)

(Maximum Process Rate – 35 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM3B) Conveyor and Transfer Points (#1-F02) (Vibrating Feeder)

(From Lime Cooler #1-N06 to Bucket Elevator #1-E03)

(Maximum Process Rate – 35 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM4A) Conveyor and Transfer Points (#1-F03) (Vibrating Feeder)

(From Lime Cooler #1-N06 to Bucket Elevator #1-E03)

(Maximum Process Rate – 35 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM4B) Conveyor and Transfer Points (#1-F04) (Vibrating Feeder)

(From Lime Cooler #1-N06 to Bucket Elevator #1-E03)

(Maximum Process Rate – 35 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM5/6) Bucket Elevator (#1-E03)

(From Vibrating Feeders #1-F01, #1-F02, #1-F03, and #1-F04 to Splitter

**#4**)

(Maximum Process Rate – 60 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air)

(Model: Aeropulse 225-10)

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

**LIME HANDLING: (CONTINUED)** 

**Kiln #1 Lime Handling / Processing to Storage Silos: (Continued)** 

08 (LM11) Splitter #4

(From Bucket Elevator #1-E03 to Silo #1-T03 and Screen #1-S01)

(Maximum Process Rate – 60 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

**(LM76) Dust Collector (#1-D06)** 

(To Silo #1-T03)

(Maximum Process Rate – 1 tons/hour)

Constructed: 2006

Control: Enclosed in building

Baghouse (Pulse-Air)

(Model: Aeropulse SB-36-6-N)

(LM33) Silo (#1-T03)

(From Dust Collector #1-D06 and Splitter #4 to Splitter #7)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM13A) Screen (#1-S01) (Mogensen Sizers – 5' x 10' Quadruple-Deck)

(Maximum Rated Capacity – 60 tons/hour)

(From Splitter #4 to Splitters #6 and #8 and Conveyors #1-C02 and #1-

C03)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM15) Splitter #6

(From Screen #1-S01 to Silo #1-T04 and Lime Mill #1-R02)

(Maximum Process Rate – 15 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air)

(Model: Aeropulse 225-10)

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

<u>LIME HANDLING</u>: (CONTINUED)

Kiln #1 Lime Handling / Processing to Storage Silos: (Continued)

08 (LM16) Silo (#1-T04)

(From Splitter #6 to Weigh Belt #1-C05) (Maximum Process Rate – 15 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM22) Splitter #8

(From Screen #1-S01 to Lime Mill #1-R02 and Conveyor #1-C01)

(Maximum Process Rate – 15 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM17A) Lime Mill (#1-R02)

(Maximum Rated Capacity – 15 tons/hour)

(From Splitters #6 and 8 to Bucket Elevator #1-E03)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM24) Conveyor and Transfer Points (#1-C01) (24" Screw)

(From Splitter #8 to Silos #1-T05 and #1-T06)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM27) Conveyor and Transfer Points (#1-C02) (24" Screw)

(From Screen #1-S01 to Silos #1-T05 and #1-T07)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

<u>LIME HANDLING</u>: (CONTINUED)

<u>Kiln #1 Lime Handling / Processing to Storage Silos</u>: (Continued)

08 (LM30) Conveyor and Transfer Points (#1-C03) (24" Screw)

(From Screen #1-S01 to Silos #1-T05 and #1-T08)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM25 / Silo (#1-T05)

LM28 / (From Conveyors #1-C01, #1-C02, and #1-C03 to Weigh Belt #1-LM31)

**C06**)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM26) Silo (#1-T06)

(From Conveyor #1-C01 to Weigh Belt #1-C07)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM29) Silo (#1-T07)

(From Conveyor #1-C02 to Weigh Belt #1-C08)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

**(LM78) Dust Collector (#1-D02)** 

(To Silo #1-T08)

(Maximum Process Rate – 1 tons/hour)

Constructed: 2006

Control: Enclosed in building

Baghouse (Pulse-Air)

(Model: Aeropulse SB-36-6-N)

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

<u>LIME HANDLING</u>: (CONTINUED)

Kiln #1 Lime Handling / Processing to Storage Silos: (Continued)

08 (LM80) **Dust Collector** (#1-D03)

(To Silo #1-T08)

(Maximum Process Rate – 1 tons/hour)

Constructed: 2006

Control: Enclosed in building

Baghouse (Pulse-Air)

(Model: Aeropulse SB-36-6-N)

(LM32) Silo (#1-T08)

(From Conveyor #1-C03 and Dust Collectors #1-D02 and #1-D03 to

Weigh Belt #1-C09)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

Kiln #1 Lime Handling from Silos to Loadout:

09 (LM34) Splitter #1-G07

(From Silo #1-T03 to Bucket Elevator #1-E03 and Weigh Belt #1-C04)

(Maximum Process Rate – 15 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM36) Weigh Belt (#1-C04) (48" x 10")

(From Splitter #1-G07 to Conveyor #1-C10) (Maximum Process Rate – 200 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D03)

Baghouse (Pulse-Air) (Model: Aeropulse 144-10)

(LM38) Weigh Belt (#1-C05) (48" x 10")

(From Silo #1-T04 to Conveyor #1-C10) (Maximum Process Rate – 200 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D03)

Baghouse (Pulse-Air) (Model: Aeropulse 144-10)

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### SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

<u>LIME HANDLING</u>: (CONTINUED)

#### Kiln #1 Lime Handling from Silos to Loadout: (Continued)

09 (LM40) Weigh Belt (#1-C06) (48" x 10")

(From Silo #1-T05 to Conveyor #1-C10) (Maximum Process Rate – 200 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D03)

Baghouse (Pulse-Air) (Model: Aeropulse 144-10)

(LM42) Weigh Belt (#1-C07) (48" x 10')

(From Silo #1-T06 to Conveyor #1-C10) (Maximum Process Rate – 200 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D03)

Baghouse (Pulse-Air) (Model: Aeropulse 144-10)

(LM44) Weigh Belt (#1-C08) (48" x 10")

(From Silo #1-T07 to Conveyor #1-C10) (Maximum Process Rate – 200 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D03)

Baghouse (Pulse-Air) (Model: Aeropulse 144-10)

(LM46) Weigh Belt (#1-C09) (48" x 10")

(From Silo #1-T08 to Conveyor #1-C10) (Maximum Process Rate – 200 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D03)

Baghouse (Pulse-Air) (Model: Aeropulse 144-10)

#### Kiln #2 Lime Handling / Processing to Storage Silos:

10 (LM7A) Conveyor and Transfer Points (#2-F01) (Vibrating Feeder)

(From Lime Cooler #2-N06 to Bucket Elevator # 2-E03)

(Maximum Process Rate – 35 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (2-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

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# SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

<u>LIME HANDLING</u>: (CONTINUED)

Kiln #2 Lime Handling / Processing to Storage Silos: (Continued)

10 (LM7B) Conveyor and Transfer Points (#2-F02) (Vibrating Feeder)

(From Lime Cooler #2-N06 to Bucket Elevator # 2-E03)

(Maximum Process Rate – 35 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (2-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM8A) Conveyor and Transfer Points (#2-F03) (Vibrating Feeder)

(From Lime Cooler #2-N06 to Bucket Elevator # 2-E03)

(Maximum Process Rate – 35 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (2-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM8B) Conveyor and Transfer Points (#2-F04) (Vibrating Feeder)

(From Lime Cooler #2-N06 to Bucket Elevator # 2-E03)

(Maximum Process Rate – 35 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (2-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM9/10) Bucket Elevator (#2-E03)

(From Vibrating Feeders #2-F01, #2-F02, #2-F03, and #2-F04 to Splitter

**#5**)

(Maximum Process Rate – 60 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (2-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM12) Splitter #5

(From Bucket Elevator # 2-E03 to Silo #2-T03 and Screen #2-S01)

(Maximum Process Rate – 60 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (2-D02)

Baghouse (Pulse-Air)

(Model: Aeropulse 225-10)

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# SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

<u>LIME HANDLING</u>: (CONTINUED)

Kiln #2 Lime Handling / Processing to Storage Silos: (Continued)

10 (LM59) Silo (#2-T03)

(From Splitter #5 to Splitter #2-G07) (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (2-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM14A) Screen (#2-S01) (Mogensen Sizers – 5' x 10' Quadruple-Deck)

(Maximum Rated Capacity – 60 tons/hour)

(From Splitter #5 to Splitters #7 and #9 and Conveyors #2-C02 and #2-

**C03**)

Constructed: 2006

Control: Enclosed in building and Baghouse (2-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM19A) Splitter #7

(From Screen #2-S01 to Silo #2-T04 and Lime Mill #2-R02)

(Maximum Process Rate – 15 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (2-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM19B) Silo (#2-T04)

(From Splitter #7 to Weigh Belt #2-C05) (Maximum Process Rate – 15 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (2-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM48) Splitter #9

(From Screen #2-S01 to Lime Mill #2-R02 and Conveyor #2-C01)

(Maximum Process Rate – 15 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (2-D02)

Baghouse (Pulse-Air)

(Model: Aeropulse 225-10)

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# SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

<u>LIME HANDLING</u>: (CONTINUED)

Kiln #2 Lime Handling / Processing to Storage Silos: (Continued)

10 (LM20A) Lime Mill (#2-R02)

(Maximum Rated Capacity – 15 tons/hour)

(From Splitters #7 and #9 to Bucket Elevator #2-E03)

Constructed: 2006

Control: Enclosed in building and Baghouse (2-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM50) Conveyor and Transfer Points (#2-C01) (24" Screw)

(From Splitter #9 to Silos #2-T05 and #2-T06) (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (2-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM53) Conveyor and Transfer Points (#2-C02) (24" Screw)

(From Screen #2-S01 to Silos #2-T05 and #2-T07)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (2-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM56) Conveyor and Transfer Points (#2-C03) (24" Screw)

(From Screen #2-S01 to Silos #2-T05 and #2-T08)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (2-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM51 / Silo (#2-T05)

LM54 / (From Conveyors #2-C01, #2-C02, and #2-C03 to Weigh Belt #2-LM57)

C06)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (2-D02)

Baghouse (Pulse-Air)

(Model: Aeropulse 225-10)

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# SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

<u>LIME HANDLING</u>: (CONTINUED)

<u>Kiln #2 Lime Handling / Processing to Storage Silos</u>: (Continued)

10 (LM52) Silo (#2-T06)

(From Conveyor #2-C01 to Weigh Belt #2-C07)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (2-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM55) Silo (#2-T07)

(From Conveyor #2-C02 to Weigh Belt #2-C08)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (2-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

(LM84) Dust Collector (#2-D02)

(To Silo #2-T08)

(Maximum Process Rate – 1 tons/hour)

Constructed: 2006

Control: Enclosed in building

Baghouse (Pulse-Air)

(Model: Aeropulse SB-36-6-N)

(LM58) Silo (#2-T08)

(From Conveyor #2-C03 and Dust Collector #2-D02 to Weigh Belt #2-

**C09**)

(Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (2-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

### Kiln #2 Lime Handling from Silos to Loadout:

11 (LM34) Splitter #2-G07

(From Silo #2-T03 to Bucket Elevator #2-E03 and Weigh Belt #2-C04)

(Maximum Process Rate – 15 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D02)

Baghouse (Pulse-Air) (Model: Aeropulse 225-10)

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# SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

<u>LIME HANDLING</u>: (CONTINUED)

### Kiln #2 Lime Handling from Silos to Loadout: (Continued)

11 (LM62) Weigh Belt (#2-C04) (48" x 10')

(From Splitter #2-G07 to Conveyor #1-C10) (Maximum Process Rate – 200 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D03)

Baghouse (Pulse-Air) (Model: Aeropulse 144-10)

(LM64) Weigh Belt (#2-C05) (48" x 10")

(From Silo #2-T04 to Conveyor #1-C10) (Maximum Process Rate – 200 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D03)

Baghouse (Pulse-Air) (Model: Aeropulse 144-10)

(LM66) Weigh Belt (#2-C06) (48" x 10")

(From Silo #2-T05 to Conveyor #1-C10) (Maximum Process Rate – 200 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D03)

Baghouse (Pulse-Air) (Model: Aeropulse 144-10)

(LM68) Weigh Belt (#2-C07) (48" x 10')

(From Silo #2-T06 to Conveyor #1-C10) (Maximum Process Rate – 200 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D03)

Baghouse (Pulse-Air) (Model: Aeropulse 144-10)

(LM70) Weigh Belt (#2-C08) (48" x 10')

(From Silo #2-T07 to Conveyor #1-C10) (Maximum Process Rate – 200 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D03)

Baghouse (Pulse-Air) (Model: Aeropulse 144-10)

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# SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

<u>LIME HANDLING</u>: (CONTINUED)

Kiln #2 Lime Handling from Silos to Loadout: (Continued)

11 (LM72) Weigh Belt (#2-C09) (48" x 10")

(From Silo #2-T08 to Conveyor #1-C10) (Maximum Process Rate – 200 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D03)

Baghouse (Pulse-Air) (Model: Aeropulse 144-10)

### **LIME ADDITIVES SYSTEM:**

13 (MC7) Silo (#1-T09)

[From Chute (-) to Weigh Belt #1-C11] (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Baghouse (Pulse-Air) (1-D03)

[Model: Aeropulse 144-10]

(MC9) Weigh Belt Feeder (#1-C11) (48" x 10")

(From Silo #1-T09 to Conveyor #1-C10) (Maximum Process Rate – 200 tons/hour)

Constructed: 2006

Control: Baghouse (Pulse-Air) (1-D03)

[Model: Aeropulse 144-10]

(MC8) Silo (#1-T10)

[From Chute (-) to Weigh Belt #2-C10] (Maximum Process Rate – 40 tons/hour)

Constructed: 2006

Control: Baghouse (Pulse-Air) (1-D03)

[Model: Aeropulse 144-10]

(MC10) Weigh Belt (#2-C10) (48" x 10")

(From Silo #1-T10 to Conveyor #1-C10) (Maximum Process Rate – 200 tons/hour)

Constructed: 2006

Control: Baghouse (Pulse-Air) (1-D03)

[Model: Aeropulse 144-10]

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# SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **LIME AND LIME ADDITIVES TRUCK LOADOUT:**

14 (LM37) Conveyor and Transfer Points (#1-C10) (42" x 260")

(From Weigh Belts #1-C04, #1-C05, #1-C06, #1-C07, #1-C08, #1-C09, #1-C11, #2-C04, #2-C05, #2-C06, #2-C07, #2-C08, #2-C09, and #2-C10 to

**Loading Chute #1-X01**)

(Maximum Process Rate – 200 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D03)

Baghouse (Pulse-Air) (Model: Aeropulse 144-10)

(LM74 / Loading Chute (Lime and Lime Additives) (#1-X01)

MC11) (From Conveyor #1-C10 to Truck Loadout) (Maximum Process Rate – 200 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D04)

Baghouse (Pulse-Air)

(Model: Aeropulse SB-36-6-N)

(LM82) Dust Collector (#1-D04)

(To Loading Chute)

(Maximum Process Rate – 1 tons/hour)

Constructed: 2006

Control: Enclosed in building

Baghouse (Pulse-Air)

(Model: Aeropulse SB-36-6-N)

(LM75 / Truck Loadout

MC12) (From Loading Chute #LM74 / MC11)

(Maximum Process Rate – 200 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (1-D04)

Baghouse (Pulse-Air)

(Model: Aeropulse SB-36-6-N)

#### **HYDRATE PLANT**:

15 (HYD2) Conveyor and Transfer Points (Pneumatic)

(From Silo #1-T08 to Silo #3-T01)

(Maximum Process Rate – 15 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (3-D01)

Baghouse (Pulse-Air) (Model: Aeropulse 289-10)

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# SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **HYDRATE PLANT: (CONTINUED)**

15 (-) **Dust Collector** (#3-**D01**)

(To Silo #3-T01)

(Maximum Process Rate – 1 tons/hour)

Constructed: 2006

Control: Enclosed in building

Baghouse (Pulse-Air) (Model: Aeropulse 289-10)

(HYD3) Silo (#3-T01)

(From Conveyor #HYD2 and Dust Collector #3-D01 to Lime Hydrator

**#HYD4**)

(Maximum Process Rate – 15 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (3-D01)

Baghouse (Pulse-Air) (Model: Aeropulse 289-10)

(-) Dust Collector (#3-D02)

(To Lime Hydrator #HYD4)

(Maximum Process Rate – 1 tons/hour)

Constructed: 2006

Control: Enclosed in building

Baghouse (Pulse-Air) (Model: Aeropulse 289-10)

(-) Dust Collector (#3-D03)

(To Lime Hydrator #HYD4)

(Maximum Process Rate – 1 tons/hour)

Constructed: 2006

Control: Enclosed in building

Baghouse (Pulse-Air) (Model: Aeropulse 144-10)

(HYD4) Lime Hydrator

(From Silo #3-T01 and Dust Collectors #3-D02 and #3-D03 to Silo #3-

T03)

(Maximum Process Rate – 19.8 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (3-D03)

Baghouse (Pulse-Air) (Model: Aeropulse 144-10) Permit Number: <u>V-06-018</u> Page: <u>42</u> of <u>61</u>

# SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **HYDRATE PLANT: (CONTINUED)**

15 (-) **Dust Collector** (#3-**D04**)

(To Silo #3-T03)

(Maximum Process Rate – 1 tons/hour)

Constructed: 2006

Control: Enclosed in building

Baghouse (Pulse-Air)

(Model: Aeropulse SB-36-6-N)

(HYD5) Silo (#3-T03)

(From Lime Hydrator and Dust Collector #3-D04 to Truck Loading

Chute)

(Maximum Process Rate – 19.8 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (3-D04)

Baghouse (Pulse-Air)

(Model: Aeropulse SB-36-6-N)

(-) **Dust Collector** (#3-**D05**)

(To Loading Chute)

(Maximum Process Rate – 1 tons/hour)

Constructed: 2006

Control: Enclosed in building

Baghouse (Pulse-Air)

(Model: Aeropulse SB-36-6-N)

(HYD6) Loading Chute (Hydrate)

(From Silo #3-T03 and Dust Collector #3-D05 to Truck Loadout)

(Maximum Process Rate – 60 tons/hour)

Constructed: 2006

Control: Enclosed in building and Baghouse (3-D05)

Baghouse (Pulse-Air)

(Model: Aeropulse SB-36-6-N)

(HYD7) Truck Loadout

(From Loading Chute #HYD6)

(Maximum Process Rate – 60 tons/hour)

Constructed: 2006

Control: Baghouse (Pulse-Air) (3-D05)

(Model: Aeropulse SB-36-6-N)

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# SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **APPLICABLE REGULATIONS:**

Regulation 401 KAR 59:010, New process operations, which applies to emission units constructed on or after July 2, 1975.

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality applies to each of the affected facilities listed above constructed after September 22, 1982.

# 1. **Operating Limitations:**

None

### 2. <u>Emission Limitations</u>:

- a. Pursuant to Regulation 401 KAR 51:017, the particulate emissions from each of the affected facilities listed below are limited as follows:
  - 1) Combined emissions of particulate matter from the seven conveyor and transfer points, emission points 08 (LM3A), (LM3B), (LM4A), (LM4B), (LM24), (LM27), and (LM30); the one bucket elevator, emission point 08 (LM5/6); the five splitters, emission points 08 (LM11), (LM15), (LM22), 09 (LM34), and 11 (LM34); the six silos, emission points 08 (LM33), (LM16), (LM25/LM28/LM31), (LM26), (LM29), and (LM32); the one screen, emission point 08 (LM13A); and the one lime mill, emission point 08 (LM17A); that are controlled by baghouse #1-D02, shall not exceed 0.077 lbs/hour.
  - Combined emissions of particulate matter from the fourteen weigh belts, emission points 09 (LM36), (LM38), (LM40), (LM42), (LM44), (LM46), 11 (LM62), (LM64), (LM66), (LM68), (LM70), (LM72), 13 (MC9), and (MC10); the two silos, emission points 13 (MC7) and (MC8); and the one conveyor and transfer points, emission point 14 (LM37); that are controlled by baghouse #1-D03, shall not exceed 0.44 lbs/hour.
  - 3) Combined emissions of particulate matter from the seven conveyor and transfer points, emission points 10 (LM7A), (LM7B), (LM8A), (LM8B), (LM50), (LM53), and (LM56); the one bucket elevator, emission point 10 (LM9/10); the three splitters, emission points 10 (LM12), (LM19A), and (LM48); the six silos, emission points 10 (LM59), (LM19B), (LM51/LM54/LM57), (LM52), (LM55), and (LM58); the one screen, emission point 10 (LM14A); and the one lime mill, emission point 10 (LM20A); that are controlled by baghouse #2-D02, shall not exceed 0.077 lbs/hour.
  - 4) Combined emissions of particulate matter from the one loading chute, emission point 14 (LM74/MC11); and the one truck loadout, emission point 14 (LM75/MC12); that are controlled by baghouse #1-D04, shall not exceed 0.44 lbs/hour.

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# SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **Emission Limitations:** (Continued)

- a. 5) Combined emissions of particulate matter from the one conveyor and transfer points, emission point 15 (HYD2); and the one silo, emission point 15 (HYD3); that are controlled by baghouse #3-D01, shall not exceed 0.021 lbs/hour.
  - 6) Combined emissions of particulate matter from the one lime hydrator, emission point 15 (HYD4), that is controlled by baghouse #3-D03, shall not exceed 0.021 lbs/hour.
  - 7) Combined emissions of particulate matter from the one silo, emission point 15 (HYD5), that is controlled by baghouse #3-D04, shall not exceed 0.021 lbs/hour.
  - 8) Combined emissions of particulate matter from the one loading chute, emission point 15 (HYD6); and the one truck loadout, emission point 15 (HYD7); that are controlled by baghouse #3-D05, shall not exceed 0.168 lbs/hour.
- b. Pursuant to Regulation 401 KAR 59:010, the opacities for all lime handling points, emission points 08 (LM3A), (LM3B), (LM4A), (LM4B), (LM5/6), (LM11), (LM13A), (LM15), (LM16), (LM17A), (LM22), (LM24), (LM25/LM28/LM31), (LM26), (LM27), (LM29), (LM30), (LM32), (LM33), 09 (LM34), (LM36), (LM38), (LM40), (LM42), (LM44), (LM46), 10 (LM7A), (LM7B), (LM8A), (LM8B), (LM9/10), (LM12), (LM14A), (LM19A), (LM19B), (LM20A), (LM48), (LM50), (LM51/LM54/LM57), (LM52), (LM53), (LM55), (LM56), (LM58), (LM59), 11(LM34), (LM62), (LM64), (LM66), (LM68), (LM70), and (LM72); all lime additive points, emission points 13 (MC7), (MC8), (MC9), and (MC10); all lime and lime additive points, emission points 14 (LM37), LM74/MC11), and (LM75/MC12); and all hydrate plant points, emission points 15 (HYD2), (HYD3), (HYD4), (HYD5), (HYD6), and (HYD7); shall not exceed 20%.

#### **Compliance Demonstration Method:**

- a. Compliance with the hourly process emission limit shall be determined as follows:
  - Hourly Emission Rate = [Monthly processing rate x Emission Factor as determined from AP-42 \* / (Hours of operation per month)] x (1 control efficiency)
  - \* If an Emission Factor other than that taken from AP-42 is used, documentation on how that emission factor was derived must be submitted to the Division's Central Office for approval within 6 months of issuance of the proposed permit.
- b. Compliance with the opacity limits shall be determined as follows:
  - 1) In determining compliance with the opacity standard as listed above, the owner or operator shall use Reference Method 9 and the procedures as described in 40 CFR 60.11 and 40 CFR 60.675(c).

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# SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

## 2. <u>Emission Limitations</u>: (Continued)

#### **Compliance Demonstration Method: (Continued)**

- b. 2) If any of the emission units associated with a baghouse are in operation during any period of malfunction of the associated baghouse, the permittee shall determine compliance through maintenance of the records required by Item e. under **5. Specific Recordkeeping Requirements** below.
- c. See Section G, Condition (d)4.

### 3. <u>Testing Requirements</u>:

Pursuant to Regulations 401 KAR 50:055, General compliance requirements; 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulations 401 KAR 59:010, Section 4 and 61:020, Section 4, shall be conducted as required by the Division. The Reference Methods used to determine compliance with the aforementioned emission standards are as follows:

- a. Reference Method 1 Selection of sample and velocity traverses.
- b. Reference Method 2 Velocity and volumetric flow rate.
- c. Reference Method 3 Gas analysis.
- d. Reference Method 9 Opacity of continuous emissions.
- e. Reference Method 5 shall be used for the emission rates of particulate matter and the associated moisture content. For Reference Method 5:
  - 1) Reference Method 1 Select the sampling site and number of traverse sampling points.
  - 2) Sampling time for each run shall be at least sixty (60) minutes.
  - 3) Minimum sample volume shall be 0.85 dscm [thirty (30) dscf].
  - 4) Smaller sampling time or volumes, when necessitated by process variables or other factors, may be approved by the Cabinet.

#### 4. Specific Monitoring Requirements:

- a. The permittee shall monitor and maintain records of the following parameters:
  - 1) The monthly production rate of material processed.
  - 2) The monthly hours of operation (hours operated/month)
  - 3) The hourly pollutant emission rates.

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# SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 4. **Specific Monitoring Requirements:** (Continued)

- b. Observations are required during each shift, and when any change in method of operation or material occurs, of all operations and control equipment to determine if any air emissions are visible from the equipment or the controls. These observations will be done at any processing rate of the equipment that would preclude circumvention of the intent of this requirement. If visible emissions are observed, the permittee shall perform a Method 9 reading. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluation. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and date of certification.
- c. The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a monitoring device to determine the static pressure drop across each baghouse. This monitoring device will be read and this reading recorded once a day during the operation of the unit.

#### 5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the following information for the dust collector:
  - 1) The design and/or manufacturer's specifications.
  - 2) The operational procedures and preventative maintenance records.
  - 3) Daily records of the pressure drop across the baghouse during all periods of operation.
  - 4) During all periods of startup, shutdown, or malfunction of the baghouse, a daily (calendar day) log shall be kept of whether any air emissions were visible from the stack associated with the baghouse.
- b. Records of opacity monitoring data, including daily observations, and support information shall be kept in accordance with the provisions of Section F. Condition 2.
- c. A log shall be kept of all routine and non-routine maintenance performed on each control device.
- d. See Section F, Conditions 1 and 2.
- e. See **4. Specific Monitoring Requirements** above for additional recordkeeping requirements.

### 6. **Specific Reporting Requirements:**

- a. See Section F, Conditions 5, 6, 7, 8, 9, 10, and 11.
- b. See Section G, Conditions (a)4 and 5, (d)2, and (f)1.

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# SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 7. Specific Control Equipment Operating Requirements:

- a. If any control device that requires its associated piece(s) of equipment to be enclosed to function effectively as an emissions control, such; as a baghouse that is not sufficiently sealed as a result of poor maintenance, careless operation, or negligence, the Division will consider that control to have been circumvented. This will constitute a violation of this permit. The emissions generated by the piece(s) of equipment utilizing that control will be deemed fugitive in nature at that time. The violation must be corrected within thirty (30) days. Failure to correct the violation within thirty (30) days may result in enforcement action
- b. If any control method(s) proposed in the permit application prove to be inadequate to meet the emission requirements listed in the permit, the Division reserves the right to require additional controls, or another form of control, be utilized to meet the permit requirements.

### 8. <u>Alternate Operating Schedule:</u>

N/A

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# SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 17 (-) Generator (Diesel)

### **APPLICABLE REGULATIONS:**

There are no applicable requirements to these units other than the general applicable requirements.

### 1. **Operating Limitations:**

The emergency generator will be not exceed 500 hours of operation annually, on a twelve month rolling average, and will utilize a low sulfur fuel.

### 2. <u>Emission Limitations</u>:

N/A

### 3. <u>Testing Requirements</u>:

N/A

### 4. <u>Monitoring Requirements</u>:

See Section C, General Condition F.1.

#### 5. Recordkeeping Requirements:

- a. A log will be kept showing the hours of operation each month.
- b. A fuel usage log shall be kept showing the amount of fuel used each month. The fuel usage shall be expressed in gallons. Material Safety Data Sheets (MSDS) shall be maintained with the fuel usage log for all fuel oils purchased listing sulfur content of the fuel.
- c. All logs and MSDS sheets shall be kept on site for five (5) years from the date of last entry and shall be made available, upon request, for inspection by the Cabinet.
- d. See Section C, General Conditions B.1., B.2., and F.1.

#### 6. Reporting Requirements:

See Section C, General Conditions C.1., C.2., C.3., F.2, and G.2.

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### **SECTION C – INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

**Description** 

**Generally Applicable Regulation** 

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# SECTION D – SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for issuing Title V Permits* incorporated by reference in Regulation 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Particulate matter, carbon monoxide, nitrogen oxides, and sulfur dioxide emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

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# SECTION E – SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

2. All fugitive emissions shall be controlled in accordance with Regulation 401 KAR 63:010.

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# SECTION F – MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

- 1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place as defined in this permit, and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorizes representative of the Division for Air Quality. [Sections 1b (IV)2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
- 3. In accordance with the requirements of 401 KAR 52:020, Section 3(1)h, the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit;
  - c. Sample or monitor substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours, or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Division's Florence Regional Office at least every six (6) months during the life of this permit, unless otherwise stated in this permit. [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
- 6. The semi-annual reports are due by January 30<sup>th</sup> and July 30<sup>th</sup> of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of Regulation 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:020, Section 23. All deviations from permit requirements shall be clearly identified in the reports.

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# SECTION F – MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- 7. In accordance with the provisions of Regulation 401 KAR 50:055, Section 1, the owner or operator shall notify the Division for Air Quality's Florence Regional Office concerning startups, shutdowns, or malfunctions as follows
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
- 8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Division for Air Quality's Florence Regional Office within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6. [Section 1b (V)3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
- 9. Pursuant to Regulation 401 KAR 52:020, Title V Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the Regional Office) to the Division for Air Quality's Florence Regional Office and the U.S. EPA in accordance with the following requirements:
  - a. Identification of each term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status of the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
  - f. The certification shall be postmarked by January 30<sup>th</sup> of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality Florence Regional Office 8020 Veterans Memorial Dr. Suite 110 Florence, KY 41042 U.S. EPA Region 4 Air Enforcement Branch Atlanta Federal Center 61 Forsyth St. Atlanta, GA 30303-8960 Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601

10. In accordance with Regulation 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

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# SECTION F – MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five (45) days or sooner if required by an applicable standard, after the completion of the fieldwork.

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#### **SECTION G – GENERAL PROVISIONS**

### (a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of Regulation 401 KAR 52:020 and the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit. [Section 1a 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]

- 2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition. [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
- 3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with Regulation 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to Regulation 401 KAR 52:020, Section 12;
  - b. The Cabinet or the U.S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - c. The Cabinet or the U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- 4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking, and reissuing, or terminating the permit; or compliance with the conditions of this permit. [Section 1a, 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
- 5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority. [401 KAR 52:020, Section 7(1)]

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### SECTION G – GENERAL PROVISIONS (CONTINUED)

- (a) <u>General Compliance Requirements</u> (Continued)
- 6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal action or other action shall not invalidate any other portion or condition of this permit. [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
- 7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance. [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
- 8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the Unites States Environmental Protection Agency and citizens of the United States. [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
- 9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in Regulation 401 KAR 50:038, Section 3(6). [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
- 10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 52:020, Section 11(3)(b)]
- 11. This permit does not convey property rights or exclusive privileges. [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26]
- 12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Environmental and Public Protection Cabinet or any other federal, state, or local agency.
- 13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 52:020, Section 11(3)(d)]
- 14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 52:020, Section 11(3)(a)]
- 15. This permit consolidates the authority of any previous issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

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### SECTION G – GENERAL PROVISIONS (CONTINUED)

- (a) General Compliance Requirements (Continued)
- 16. Pursuant to Regulation 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
  - a. Applicable requirements that are included and specifically identified in the permit and
  - b. Non-applicable requirements expressly identified in this permit.
- 17. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol Form, DEP Form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the Cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least thirty (30) days prior to the test.

### (b) Permit Expiration and Reapplication Requirements

- 1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six (6) months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:020, Section 12]
- 2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets. [401 KAR 52:020, Section 8(2)]

### (c) Permit Revisions

- 1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- 2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

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### SECTION G – GENERAL PROVISIONS (CONTINUED)

(d) Construction, Start-up, and Initial Compliance Demonstration Requirements

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission points in accordance with the terms and conditions of this permit.

- 1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- 2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Florence Regional Office in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
  - a. The date when construction commenced.
  - b. The date of start-up of the affected facilities listed in this permit.
  - c. The date when the maximum production rate specified in the permit application was achieved.
- 3. Pursuant to Regulation 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- 4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to Regulation 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section 1 of this permit or order of the Cabinet.
- 5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated, but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance test on the affected facilities in accordance with Regulation 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Provision G(d)7 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test.
- 6. Terms and conditions in this permit established pursuant to the construction authority of Regulation 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

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### SECTION G – GENERAL PROVISIONS (CONTINUED)

(d) <u>Construction, Start-up, and Initial Compliance Demonstration Requirements</u> (Continued)

7. Pursuant to 401 KAR 50:045 Section 5 in order to demonstrate that a source is capable of complying with a standard at all times, a performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirement on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

### (e) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

#### (f) Emergency Provisions

- 1. Pursuant to Regulation 401 KAR 52:020, Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - a. An emergency occurred and the permittee can identify the cause of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - d. Pursuant to Regulations 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emisson limitations were exceeded due o an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
  - e. This requirement does not relieve the source of other local, state, or federal notification requirements.
- 2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement. [401 KAR 52:020, Section 24(3)]
- 3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:020, Section 24(2)]

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### SECTION G – GENERAL PROVISIONS (CONTINUED)

### (g) Risk Management

1. The permitee shall comply with all applicable requirements of Regulation 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 1515 Lanham-Seabrook, MD, 20703-1515

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

### (h) Ozone Depleting Substances

- 1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - b. Equipment used during the maintenance, service repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined in 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
  - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditiones*.

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### SECTION H – ALTERNATIVE OPERATING SCENARIOS

Prior to the burning of any fuel not listed in this permit, an application will need to be submitted to the Division for Air Quality requesting a permit modification to the existing permit after a trial burning and testing of the alternative fuel demonstrates that the alternative fuel will not exceed the permit and regulatory requirements listed in the existing permit. If the alternative fuel is approved it will have a minimum heating value equal to or greater than the heating value of the fuel used during compliance testing and the sulfur content of the fuel will be equal to or less than the sulfur content of the fuel used during compliance testing.

# SECTION I – COMPLIANCE SCHEDULE

N/A